



UTAH

AVIAN INFLUENZA SURVEILLANCE AND RESPONSE PLAN

Utah Department of Agriculture and Food

I. JUSTIFICATION

(A) Avian influenza (AI) is a disease of increasing worldwide importance with growing implications as a human disease threat.

(B) The potential for low pathogenic (LP) varieties of AI to mutate to highly pathogenic (HP) strains, affecting domestic poultry, is significant.

(C) Additional driving forces for a national H5/H7 avian influenza control plan consist of:

1. Consideration by the World Organization for Animal Health (OIE) to re-define avian influenza to include not just highly pathogenic, but all H5/H7 viruses including low pathogenic strains; and

2. Influence of international markets on the economic viability of our nation's poultry industry. It is in the best interests of government, human health, and the poultry industry to prevent and control all H5/H7 avian influenza virus infections.

(D) H5/H7 avian influenza is a disease reportable to the State Veterinarian's office by all licensed or otherwise legally practicing veterinarians in the State and all laboratories.

(E) Under a nationally-sanctioned plan, USDA-APHIS would be involved at the invitation of the State Veterinarian in the cost and control efforts of an outbreak. This Voluntary Cooperative State-Federal Program to control and eradicate H5/H7 avian influenza infections of commercial poultry is state-based and coordinated. The plan will provide for stakeholder input and participation, establishment of passive and active surveillance programs, and planning for a coordinated, pre-planned response in the event of an AI outbreak in the state. The goal is to provide a level of assurance to poultry producers and trading partners and an adequate level of surveillance and response preparedness for government.

II. AVIAN INFLUENZA ADVISORY COMMITTEE

The formation of a state advisory committee has been requested by industry in order to bring all stakeholders such as Utah Department of Agriculture and Food (UDAF), USDA-APHIS, Utah Department of Health, and various producer groups together to provide plan input. The formation of this committee is the first essential element to development of a state AI response plan. It is agreed that the AI Advisory Committee in Utah will be comprised of the following participants:

- (1) State Veterinarian – Director of Animal Industry or representative
- (2) USDA-APHIS Area Veterinarian in Charge (AVIC) or representative
- (3) Utah Department of Health representative
- (4) Utah Veterinary Diagnostic Laboratory representative
- (5) Utah State University Extension
- (6) NPIP Contact representative
- (7) Utah Egg Producer’s representative and/or consultant
- (8) Utah Turkey Marketing Board representative
- (9) Game bird representative (pheasant, chukar, quail, etc.)
- (10) Utah Fancy Poultry Association/Pigeon Breeders representative
- (11) Utah Division of Wildlife Resources representative
- (12) Department of Environmental Quality representative

III. MONITORING PLAN

(A) The State will maintain “U. S. H5/H7 Avian Influenza Monitored State” status under the National Poultry Improvement Plan (NPIP) program for avian influenza (see Appendix #1). In furtherance of that requirement the following surveillance activities will be implemented:

(B) All commercial producers should sign a *Memorandum of Understanding* (MOU) to support the diagnostic surveillance program by timely submission of appropriate specimens.

(C) The Extension veterinarian (or appointee) will institute an ongoing avian influenza awareness program for all legally practicing veterinarians and poultry producers in the state.

(D) It should be further understood that:

(1) No liability shall accrue to the UDAF for damages, losses, or injuries incidental to or arising by virtue of participation in this plan.

(2) The flock owner has the responsibility to adopt and implement the biosecurity measures set forth elsewhere in this agreement.

(3) The flock owner has the responsibility of maintaining records of flock morbidity, mortality, and production and shall make such records available for review by the UDAF as requested.

(E) Serology

(1) *Testing*

(a) Serologic testing will be used as a screening test for monitoring purposes only. Routine screening for type A avian influenza virus in poultry will be performed using

91 either agar gel immunodiffusion (AGID) or enzyme-linked immunosorbent assay
92 (ELISA). The AGID test is to be performed according to the “National Poultry
93 Improvement Plan and Auxiliary Provisions” §147.9¹; ELISA test is performed using
94 only federally licensed kits and following the manufacturer’s instructions.

95 (b) A premise or flock will be considered suspect positive if serologic testing
96 reveals antigenic exposure to Type A influenza virus.

97 (c) A premise or flock will be considered positive only when live influenza virus
98 is isolated or its presence detected by polymerase chain reaction (PCR) testing.

99 (d) Positive test results of any type will be reported immediately to the State
100 Veterinarian, as required by Rule in R58-2-2. In the case of a positive serologic test, the
101 State Veterinarian may issue a *Hold Order* and prescribe certain biosecurity measures to
102 be implemented until virus identification is completed and/or assessment of the clinical
103 symptoms exhibited by the flock is made.

104 i) Hold Order is defined as authority of the State Veterinarian to impose
105 movement restrictions and/or testing requirements appropriate to conditions until a
106 definitive diagnosis or quarantine decision is reached. The Hold Order may involve all or
107 any portion of restrictions defined under Quarantine Measures (see section V) as deemed
108 appropriate to the circumstances by the State Veterinarian.

110 (2) *Passive Surveillance*

111 (a) All laboratories that perform diagnostic procedures on avian species (private,
112 State-Federal Cooperative, public health, and university laboratories) will examine all
113 submitted cases of severe, atypical, or otherwise unexplained respiratory disease,
114 gastrointestinal disease, neurologic disease, egg production drops, and high mortality, for
115 avian influenza by both a USDA-approved serologic test and a USDA-approved
116 influenza virus detection test. Results of such testing will be reported quarterly to the
117 State Veterinarian. Positive tests will be reported immediately.

118 (b) A minimum of 60 meat turkey processing plant blood samples per month are
119 to be tested by USDA-approved serologic protocol (i.e., AGID or ELISA) and reported
120 quarterly to the State Veterinarian. Positive tests will be reported immediately. Plant
121 records shall be maintained for 3 years (NPIP §146.11.c).

123 (3) *Active Surveillance*

124 (a) UDAF in conjunction with USDA, APHIS, VS, Utah Veterinary Diagnostic
125 Laboratory (UVDL), and commercial producer organizations will implement a
126 commercial poultry surveillance program.

127 (b) Active surveillance must include serologic sampling of sentinels in the field.

128 (i) At least 30 clearly identified unvaccinated birds for AI within a flock
129 are caught and monitored quarterly (90 days) by serologic or other approved tests.
130 Strategically located flocks may serve as sampling units if at least 30 randomly selected
131 members of each unvaccinated flock are monitored quarterly by serologic or other
132 approved tests. This targeted surveillance is to consist of flocks considered at greater risk

¹ At the January 26, 2005 General Conference Committee Meeting it was passed to immediately implement an amendment to the laboratory protocol for the AGID test for avian influenza requiring no more than three unknowns be tested in a seven-well format with the center well containing antigen.

of becoming infected with AI, such as turkeys allowed access to outdoors in areas where wild waterfowl are prone to live.

(ii) Number of sampling units required (i.e., flocks to be monitored) will depend on geographic location and other relevant circumstances, such as proximity to wild waterfowl, cross-traffic potential, etc.².

IV. RESPONSE PLAN

The State Veterinarian and the USDA, APHIS, VS Area Veterinarian in Charge (AVIC) will administer an Initial Containment and Control Plan developed in conjunction with the Advisory Committee. The Commissioner of Agriculture may request the Governor to declare a state of emergency once state resources have been exhausted or are found inadequate. USDA-APHIS-VS will be invited to develop an Incident Command Center to implement the deployment of necessary state and federal resources to respond to the emergency outbreak.

(A) Criteria for declaring a premise suspect-positive for AI

(1) Epidemiologic link with an AI suspect flock or premise. An epidemiologic link is considered to be established if one or more of the following occur(s):

(a) Poultry operations employing workers who reside in the same household as person(s) associated with a confirmed AI outbreak elsewhere.

(b) All farms within the same organization that the AI outbreak occurs – particularly if there is sharing of equipment and/or personnel, or if close geographic ties exist.

(c) Poultry farms, companies, or personnel using common facilities or equipment, such as breaker plant, feed mill, egg flats, trucking company, vaccination crews, or other equipment.

(2) Flock/bird with no clinical signs, no lesions compatible with AI, and no epidemiologic link but AI-positive by one of the following tests:

(a) AGID

(b) ELISA³

(c) DirectigenTM Flu A

(B) Criteria for declaring a premise positive for HP/LP AI during a confirmed AI outbreak:

(1) *Flocks/birds showing clinical signs of respiratory disease, sudden unexplained drop in egg production, or lesions consistent with AI (i.e., edema of the head, comb, or wattles; subcutaneous hemorrhage of feet or shanks; hemorrhage/necrosis of comb, wattles, trachea, heart, and/or gut) should be considered suspicious for AI until confirmed or ruled out by appropriate diagnostic tests.*

² Additional protocol may be written into the MOU if needed.

³ Because of the possibility of false positives using ELISA, all ELISA-positive sera shall be re-tested using AGID.

(2) *Premises inside surveillance zones are considered positive if birds exhibit clinical signs and/or gross lesions consistent with low or highly pathogenic avian influenza virus plus one of the following laboratory tests.*

(a) Isolation and identification of AIV

(b) Positive RT-PCR with H5 or H7 AIV specific primer/probe set

(c) Presence of H5 or H7 AIV subtype-specific serum antibodies

(3) *Premises inside surveillance zones without clinical signs and/or gross lesions, must meet two of the following conditions to be declared positive.*

(a) Directigen-positive (cannot be only criterion to designate a premise as positive even with an epidemiologic link)

(b) Isolation and identification of H5 or H7 subtypes of AIV

(c) Positive RT-PCR with H5 or H7 AIV specific primer/probe set

(d) Presence of H5 or H7 AIV subtype-specific serum antibodies

(e) Epidemiologic link. An epidemiologic link is considered to be established if one or more of the following occur(s):

(i) Poultry operations employing workers who reside in the same household as person(s) associated with a confirmed AI outbreak elsewhere.

(ii) All farms within the same organization that the AI outbreak occurs – particularly if there is sharing of equipment and/or personnel, or if close geographic ties exist.

(iii) Poultry farms, companies, or personnel using common facilities or equipment, such as breaker plant, feed mill, egg flats, trucking company, vaccination crews, or other equipment.

(C) Initial response plan for an AI-positive flock or premise

(1) *Positive AI serology (AGID or ELISA) without increased mortality or other clinical signs*

(a) The flock or farm will be placed under Hold Order and strict biosecurity measures will be met.

(b) All commercial poultry flock owners will be informed of the status of the Hold Order.

(c) Cloacal and pharyngeal swabs from birds in the infected flock shall be sent to UVDL for testing by RT-PCR.

(i) If RT-PCR is positive for either H5 or H7, swabs will be immediately forwarded to the National Veterinary Services Laboratories (NVSL) for subtyping. NVSL will carry out virus isolation for characterization and pathogenicity testing. Initial subtype results should be obtained within 24 to 48 hours. Pathogenicity of the isolate is normally determined within 5 to 20 days.

(2) *Positive AI serology accompanied by significant unexplained on-farm mortality or other clinical signs*

(a) The flock or farm will be quarantined and strict biosecurity measures will be met.

(b) A quarantine zone around the affected premises will be imposed, and other company-owned or other related flocks will be assessed for risk based on levels of biosecurity in place at the time of the outbreak.

(c) Pooled (up to five birds per tube) pharyngeal and cloacal swabs will be collected according to Table 1 and submitted to UVDL for RT-PCR testing.

(d) Tissues (lung, spleen, brains, and/or intestines) from individual dead birds will be sent to UVDL. Positive tissues will be forwarded to NVSL for virus isolation, characterization, and pathogenicity testing. All testing and collection of samples will be performed on-site using appropriate biosecurity precautions.

(D) Response following definitive diagnosis of AI (subtype-dependent)

(1) LPAI subtype H5 or H7

(a) The flock or farm will be quarantined and strict biosecurity measures will be met.

(b) Following consultation with USDA and industry parties involved, an infected flock may be depopulated. This depopulation may take place as much as two to four weeks after the initial outbreak in order to reduce the amount of virus spread by infected virus-shedding birds. If there is depopulation then costs would be covered by state/federal indemnity arrangements.

(c) Spent laying hen, turkey breeder, or turkey meat flocks found to be serologically positive to LPAI H5/H7 but without the ability to infect sentinel birds or evidence of virus shedding may be moved to approved slaughter. Sequential depopulation by slaughter may occur once viral testing and sentinel birds indicate the flock to be without active infection for a period of at least three weeks.

(i) If birds are going to approved slaughter there will be no indemnity.

(d) Limited and controlled vaccination of commercial laying hen, turkey breeder, or turkey meat flocks may be used as a method of eradicating the disease, provided that adequate biosecurity is in place with approval of the state veterinarian.

(i) Cost of vaccination will be covered by the producer(s) implementing the vaccination program.

(e) Surveillance of all flocks or farms surrounding an infected flock as per section V.A. of this document will be undertaken, and any other company-owned or other epidemiologically related flocks located outside the surveillance zone will also be monitored. Surveillance will be by use of RT-PCR for H5 or H7 AI.

(i) Cost of testing other company-owned or related flocks will be covered by the producer(s); epidemiologically unrelated surrounding flocks will be tested at state/federal expense.

(f) Serologic surveillance will continue weekly until the infected flock has been free of active infection for at least 30 days or until all surrounding and epidemiologically linked flocks or farms have been sufficiently tested and found free of active infection for a period of at least 30 days.

(g) Flock or farm will be tested according to Table 1, taking into consideration special stipulations (if any) contained in the MOU.

(h) Pooled (up to five birds/tube) pharyngeal and cloacal swabs will be submitted to UVDL for RT-PCR testing. All testing and collection of samples will be performed on-site using appropriate biosecurity precautions.

Table 1. Number of birds sampled for serology, PCR, and/or virus isolation on each premise.^a

No. birds on premise	Minimum number of birds to be sampled
15 or less.....	Sample all
16 to 49.....	15
50 or greater.....	30

^aAssuming a 95% or greater sensitivity and 99% specificity for the diagnostic testing system used, sampling the indicated number of birds will result in a 95% certainty that at least one positive bird will be detected if at least a 25% prevalence of HPAI virus shedding exists among birds on the premises at the time of sample collection

(2) Highly Pathogenic Avian Influenza (HPAI)

(a) The flock or farm will be quarantined and strict biosecurity measures will be met.

(b) HPAI is an emergency animal disease and therefore infected flock(s) will be depopulated.

(c) Appraisal of the flock is to occur prior to depopulation as required in Title 4-31-3 of the Utah Code (unannotated).

(d) Surveillance will be the same as that used for LPAI H5/H7

(3) LPAI other subtypes

(a) Strict biosecurity measures will be maintained throughout the life of the flock.

(b) Control measures to be taken are to be presented in writing by poultry producers to state officials.

(c) Surveillance shall be carried out in adjacent or epidemiologically linked flocks until the infection has been shown to no longer be active. This testing shall be in the form of serology, virus isolation, RT-PCR and/or sentinel birds.

(i) Cost of testing will be covered by the producer(s).

(ii) The producer should be able to take samples, when under the direction of an accredited veterinarian.

V. QUARANTINE MEASURES

Quarantine authority resides with the State Veterinarian, Commissioner of Agriculture, and the Governor. Quarantines on all movement of poultry within, into, and out of one or more of the designated Containment Regions will be imposed by the State Veterinarian upon confirmation of the isolation of live AI virus and subject to approval of the Commissioner of Agriculture. Quarantines will be enforced by Department of Agriculture and Food personnel and local law enforcement officers.

314
315 **(A) Establishment of surveillance zones**
316

317 (1) Three distinct zones, with varying intensities of surveillance will be established:

- 318 (a) *Affected Zone* included the area within 5 miles (8 km) of the index flock;
319 (b) *Surveillance Zone* including the area between 5 and 10 miles (8 and 16 km) of
320 the index flock;
321 (c) *Buffer Zone* including the area between 10 and 30 miles (16 and 50 km) of the
322 index flock.

323
324 (2) Particular attention to surveillance efforts is to be given to company-owned, other
325 epidemiologically related flocks, common breaker plants, feed mills, vaccination crews,
326 movement of other equipment and personnel, recently purchased breeder stock, or recent
327 participation in exhibition shows or swap meets. These potential epidemiologic links
328 shall be rigorously assessed for risk based on levels of biosecurity in place at the time of
329 the outbreak.

330
331 (3) *Affected Zone*

332 (a) The Affected Zone includes the area within 5 miles (8 km) of the index flock.
333 The target population to include in surveillance will be all commercial and non-
334 commercial poultry operations.

335 (b) *Commercial poultry operations* (defined as any marketing of poultry or
336 poultry products)

337 (i) Commercial poultry operations will continue to conduct active
338 serologic surveillance as required by this document and the existing MOU.

339 (ii) Cloacal and tracheal swabs will be collected by or under the
340 supervision of a USDA-accredited veterinarian from poultry in each house, building, or
341 flock located on the operation. Sick and freshly dead birds are targeted for sampling.

342 (iii) The total number of birds that will be sampled in each unit is
343 presented in Table 1. Serologic surveillance shall continue weekly for a minimum of 30
344 days after the last active case of influenza is depopulated, processed, or no longer
345 shedding virus.

346 (iv) Swab samples will be collected weekly for a minimum of 30 days
347 after the last active case of influenza is depopulated, processed, or no longer shedding
348 virus.

349
350 (c) *Non-commercial poultry operations*

351 (i) An inventory of at-risk non-commercial operations will be developed
352 by UDAF and USDA/APHIS/VS of the affected zone. At-risk operations are defined as
353 those with poultry, waterfowl, pigeons, or ratites.

354 (ii) All at-risk non-commercial operations will have swab samples
355 collected for RT-PCR testing and/or virus isolation. Both cloacal and tracheal samples
356 will be collected from gallinaceous birds and ratites; only cloacal samples will be
357 collected from waterfowl.

358 (iii) The total number of birds that will be sampled in each unit is
359 presented in Table 1. Serologic surveillance shall continue weekly for a minimum of 30

days after the last active case of influenza is depopulated, processed, or no longer shedding virus.

(iv) Swab samples for RT-PCR testing and/or virus isolation shall be collected weekly for a minimum of 30 days after the last active case of influenza is depopulated, processed, or no longer shedding virus.

(4) *Surveillance Zone*

(a) The surveillance zone includes the area between 5 and 10 miles (8 and 16 km) of the index flock. The target population to include in surveillance includes all commercial and non-commercial poultry operations. Surveillance is also to include, when considered appropriate, any commercial or non-commercial flocks with epidemiologic links to the index flock that might be located outside of the official surveillance and quarantine zones. Surveillance efforts in this zone will be conducted simultaneously with those in the affected zone.

(b) *Commercial poultry operations*

(i) Testing procedures for commercial poultry operations in the surveillance zone will be identical to those applied in the affected zone.

(ii) Cloacal and tracheal swabs samples for RT-PCR testing and/or virus isolation will be collected from all commercial operations at the initiation of this surveillance plan and again 21 days following initial sampling. The total number of birds to be sampled on each operation is presented in Table 1.

(c) *Non-commercial poultry operations*

(i) Testing procedures for non-commercial poultry operations in the surveillance zone will be identical to those applied in the affected zone.

(ii) Cloacal and tracheal swabs samples for RT-PCR testing and/or virus isolation will be collected from each non-commercial operation at the initiation of this surveillance plan and again 21 days following initial sampling. The total number of birds to be sampled on each operation is presented in Table 1.

(5) *Buffer Zone*

(a) The buffer zone includes the area between 10 and 30 miles (16 and 50 km) from the index flock. Surveillance is also to include, when considered appropriate, any commercial or non-commercial flocks with epidemiologic links to the index flock that might be located outside of the official buffer, surveillance, and affected zones.

(b) An inventory of commercial and non-commercial poultry operations will be developed by UDAF and USDA/APHIS/VS in conjunction with the Advisory Committee. All at-risk non-commercial poultry operations within 0.3 miles (0.5 km) of commercial poultry operations will be identified, and tracheal or cloacal swab samples collected once for RT-PCR. The total number of birds to be sampled on each operation is presented in Table 1.

(c) Commercial poultry operations will comply with all other requirements as contained in the existing MOU.

406 **(B) Movement and biosecurity**

407 (a) Movement controls will be implemented relating to live birds, dead birds,
408 eggs, egg flats, litter, trucks, equipment, workers, etc., within the affected zone. These
409 orders will remain in place until surveillance is completed.

410 (b) No avian species may be moved out of or into the quarantined area.

411 (c) No poultry products or supplies, *excluding properly washed and sanitized*
412 *and/or monitored for AI: table eggs, egg products, or processed poultry products in*
413 *properly sanitized containers and vehicles*, may be moved off the affected premises or
414 out of the quarantine area. Eggs going to breaker must be transported in disposable non-
415 returnable flats.

416 (d) Trucks or vehicles entering the affected premises must be thoroughly
417 disinfected prior to entering and leaving the affected premises.

418 (e) If testing within the affected, surveillance, or buffer zone detects any
419 additional positive flocks or farms, the quarantine zone will be extended accordingly.

420 (f) Only permitted movements will be allowed until surveillance is completed
421 within all three zones.

422 (g) Industry and regulatory officials may discuss specific details in the event of an
423 outbreak.

424
425 **(C) Depopulation and disposal**

426 (a) Small populations will be euthanized humanely and disposed by incineration
427 or burial on premise or in an appropriate landfill. Experience dictates that large numbers
428 of birds can overwhelm incinerators and private arrangements for burial or composting.
429 Larger populations will be disposed by burial at an acceptable landfill with attention to
430 transportation routes and disinfection of transport vehicles.

431 (b) If depopulation is chosen as the preferred method of dealing with an H/LPAI
432 outbreak, the following methods may be used for disposal of the birds.

433 (i) In-house or approved on site composting may be used for disposal of
434 birds and is the desired method when practical. (Appendix #3)

435 (ii) Birds that are not able to be composted may be disposed of in an
436 approved landfill in compliance with Department of Environmental Quality requirements.
437 Vehicles transporting carcasses to the landfill (and upon returning) must be covered and
438 sealed to prevent escape of liquid and airborne material, such as blood, feathers, and
439 dander. (See Appendix # 4 for landfill locations, capacity, and availability.)

440 (iii) Smaller flocks may be incinerated using the UDAF T400 Airburner,
441 in compliance with Department of Environmental Quality requirements, if conditions
442 permit.

443
444 **(D) Euthanasia**

445 (a) Only American Veterinary Medical Association (AVMA) approved methods
446 of euthanasia shall be employed.

447 (b) CO₂ gas injected into containers will be the primary, but not necessarily the
448 only, method of euthanasia.

452 **(E) Premises decontamination and disinfection**

453 (a) Manure and all organic material shall be completely removed from infected
454 buildings. If taken to an approved off-site location, it must be transported in a covered
455 and leak-proof container.

456 (b) The sides of the building shall be scraped to remove all residual organic
457 material that might harbor virus.

458 (c) Manure shall be buried or composted on the premises or double bagged and
459 taken to a designated landfill or incinerator according to an approved transportation plan,
460 and taken to an approved off-site location in a covered and leak-proof container.

461 (d) After cleaning, the physical facility and equipment shall be appropriately
462 cleaned and disinfected with Virkon S[®] or other approved disinfectants.

463 (e) Rodent and fly control measures will be intensified if necessary.

464 (f) Poultry repopulation of the infected premises shall not occur until the disease
465 is deemed to be eradicated by state and federal animal health officials plus two weeks.
466 Sentinel birds may be required prior to repopulation.

467
468 **(F) Biosecurity practices**

469
470 (1) Ongoing biosecurity practices are to be followed before and after outbreaks according
471 to Appendix #5 and the MOU. Additional guidelines are found at the following web sites:

472 (c) Commercial turkeys – *Biosecurity Principles: Protecting the Utah Turkey*
473 *Industry*, USU Extension Fact Sheet AG/Poultry Health/Biosecurity/03,
474 <http://extension.usu.edu/files/publications/Biosecurity03.pdf>

475 (d) Exhibition poultry producers and exhibitors – *Biosecurity Principles: Pro-*
476 *tecting Your Investment*, USU Extension Fact Sheet AG/Poultry/Health/Biosecurity/01
477 <http://extension.usu.edu/files/agpubs/poulprinciples.pdf>

478
479
480 **VI. PUBLIC RELATIONS RESPONSE/COMMUNICATION**

481 UDAF and USDA/APHIS/VS will strive to inform the partners of the situation via a
482 contact list including the AI Advisory Committee, Accredited Veterinarians, appropriate
483 industry members, and all signatory parties of an MOU regarding this plan.

484
485 (A) All inquiries by public media about serologic findings, outbreaks, or other questions
486 dealing with actual or suspected cases of AI infection in Utah are to be directed to the
487 State Veterinarian's office.

488
489 (B) Information released to the public should be timely and include the following general
490 information:

- 491 1. Nature and extent of the emergency.
492 2. Impacted or potentially affected areas of the state.
493 3. Human health implications or lack thereof.
494 4. Activities being carried out by government officials and industry leaders to
495 respond to the outbreak or mitigate its effects.
496

(C) The use of radio and television may include prepared announcements, interviews, question and answer sessions, live footage, and so forth depending on the circumstances.

(D) Information released may also include newspaper inserts or supplements which provide detailed information the public could use, and information about the steps being taken by the state and industry to protect them.

Appendix #1

Avian influenza surveillance under the NPIP is conducted at different levels. The NPIP awards an “Avian Influenza Clean” status to flocks that satisfy the requirements for avian influenza.

NPIP Requirements for “Avian Influenza Clean” status



U.S. Avian Influenza Clean Egg-and Meat-Type chicken

–Primary. A minimum of 30 birds would have to have been tested negative for antibodies to avian influenza when the flock is more than 4 months of age to qualify. After qualification, a sample of at least 30 birds from the flock would have to be tested negative at intervals of 90 days to retain the classification.

U.S. Avian Influenza Clean Egg-and Meat-Type chicken

–Multiplier. A minimum of 30 birds would have to have been tested negative for antibodies to avian influenza when the flock is more than 4 months of age to qualify. After qualification, a sample of at least 30 birds from the flock would have to be tested negative at intervals of 180 days to retain the classification.

Additionally, NPIP also grants an H5/H7 Avian Influenza Clean classification for turkey breeding flocks.

Appendix #3

PROCEDURE FOR IN-HOUSE COMPOSTING

DEAD OR EUTHANIZED BIRDS infected with AIV may be composted in the following manner:

1. Twelve inches of litter, straw, shavings or other organic material should be used as a base. An eight to ten inch layer of bird carcasses is piled on top of this and sprayed with enough water to saturate the feathers. Six inches of organic

material is placed on top of this. Successive layers may be piled on each other to the height of six feet. The width of the windrow should be approximately twelve feet.

2. The house is heated to 100° F for three days.

3. Windrow temperatures are monitored and should reach 135° to 145° F within one week.

4. The windrow is turned at two weeks and the house is heated again for three days.

5. Windrow temperatures continue to be monitored.

6. Compost may be removed after one month.

Appendix #4

LANDFILL LOCATIONS AND AVAILABILITY IN THE STATE OF UTAH

County	Landfill name	Physical address	Potential capacity (tons/day)	Contact person	Phone

Appendix #5

GENERAL BIOSECURITY MEASURES TO PREVENT TRANSMISSION OF AVIAN INFLUENZA

ISOLATION refers to the confinement of animals within a controlled environment.

AIV may be mechanically transmitted by anything that can walk, crawl, or fly from farm to farm.

1. Clean out vegetation around poultry houses to remove shelter and food for possible carriers.
2. Institute a vector control program for insect, mammal and avian vectors. These vectors are important because they can mechanically carry infected feces from one house or premises to another.
 - a. Improve barriers to prevent the access of wild birds to poultry houses.
 - b. Institute an insect control program. Flies of several species are important in the transfer of AIV.
 - c. Rodents have implicated in the transfer of AIV. Rodent control and preventing their traffic between houses on a single premises are essential.
3. Prevent the accumulation of standing water. This is a great attraction to migrating waterfowl and shorebirds, both of which have been implicated in AI outbreaks/transmission.
4. Limit sources of food for wild and free-flying birds. Clean up spills when they happen.
5. Do not allow employees to raise their own poultry or attend poultry markets or shows.
6. Freshly laundered clothes for employees should be changed into at the farm. These clothes should be left at the farm at the end of the day.
7. Employees should shower out at the end of the day.
8. The interior of cars/vehicles should be sprayed for flies prior to leaving the premises.
9. Manure and dead birds may not move from the premises unless appropriate biosecurity principles are adhered to.

The spread of avian influenza follows the movement of people and equipment.

1. Do not allow movement of people, your employees or other individuals, from your farm to other farms.
2. Conduct business by telephone. Inform other farms of the need for heightened biosecurity.
3. Do not let truck drivers, repairmen, or delivery personnel step out onto your facility without new protective foot covering and coveralls.
4. Use gates and signs to control traffic
5. Wash and disinfect all vehicles prior to them leaving the farm.
6. Avoid movement of equipment off of the farm. Wash and disinfect prior to equipment leaving the farm.